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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/035,661

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Jerry L. Mizell

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01/25/2005

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EXAMINER

NGUYEN, DUC MINH

ART UNIT

PAPER NUMBER

2643

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/035,661

Applicant(s)

MIZELL ET AL.

Examiner

Duc Nguyen

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 19-21, 23-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Liebowitz et al (5,812,545).

Consider claim 1. Liebowitz teaches a method of performing traffic volume accounting in a mobile telecommunication system, comprising reading a service marking (voice, data, video in associated with CIR, EIR or ABR services) included in a first packet received by a first node (terminal 12 in associated with NMM 78 and NMC 13; col. 7, ln. 45 to col. 8, ln. 45; col. 19, ln. 40-50) of the telecommunication system (10); and performing a first increment to a counter in a first traffic volume container of a call detail record (see figs 10-12; col. 20, ln. 1-17), the first increment indicative of a volume of data in the first packet (prime hour kilo-characters sent and non-prime hour kilo characters sent), the first traffic volume container dedicated to a service associated with the service marking (figs. 9-12, col. 17, ln. 34 to col. 20, ln. 30). Liebowitz further teaches applying at least on billing rate, based on the service marking, to the counter in the traffic volume container (fixed rate for CIR, variable rates for other services such as EIR, ECIR; column(s) 17, line(s) 34-57; column(s) 19, line(s) 13-33).

Art Unit: 2643

Consider claim 2. Liebowitz further teaches that billing system (190) processes the CDR files (196) to generate customer invoices (col. 18, ln. 25-37; col.19, ln. 51-67). It is noted that CDR files are referred to CDR of call has been terminated or completed.

Consider claim 3. Liebowitz further teaches reading a differentiated service codepoint in the first packet by the first node (service class; col. 7, ln. 45 to col. 8, ln. 45; col. 10, ln. 26-47).

Consider claim 4. Figs. 6-7B; col. 10, ln. 3 to col. 17, ln. 33 read on the limitations of this claim.

Consider claim 5. Liebowitz further teaches the earth terminal (12) are operate bursts to transmit user data via a satellite (i.e., writing requested service in the packet), to process data received from the satellite, and to transmit received data to the addressed user access devices (col. 2, ln. 30-38) that read on writing service marking (requesting services) by the first node into the first packet prior to reading the service marking.

Consider claims 6-7. Figs. 1-3 show that at least one terminal (12) in combination with the NMC (13) and billing system (190) support more than one earth terminal (12). Therefore, Liebowitz teachings as applied in claim 1 are also applied to the other earth terminal.

Consider claims 19-21. Liebowitz teaches a node of a network for performing billing procedures on call detail records, comprising a processing unit (198); memory unit (RAM or ROM is inherently associated with the computer 198); an interface for receiving the CDR (billing computer 198 receives CDR files from network management system 210). Liebowitz further teaches a method of performing traffic volume accounting in a mobile telecommunication system, comprising reading a service marking (voice, data, video in associated with CIR, EIR or ABR services) included in a first packet received by a first node (terminal 12 in associated with

Art Unit: 2643

NMM 78 and NMC 13; col. 7, ln. 45 to col. 8, ln. 45; col. 19, ln. 40-50) of the telecommunication system (10); and performing a first increment to a counter in a first traffic volume container of a call detail record (see figs 10-12; col. 20, ln. 1-17), the first increment indicative of a volume of data in the first packet (prime hour kilo-characters sent and non-prime hour kilo-characters sent), the first traffic volume container dedicated to a service associated with the service marking (figs. 9-12, col. 17, ln. 34 to col. 20, ln. 30). Liebowitz further teaches that the billing system (190) keeps track of an originator (e.g., the requestor, user, customer or caller; col. 18, ln. 59 to col. 19, ln. 50).

Consider claim 23. Figs. 1-2 show a plurality of mobile terminal (12; col. 2, ln. 1-20, ln. 30-38).

Consider claim 24. Figs 10-12 read on the limitations of this claim, since the call detail record include other traffic volume container (frame relay PVCs, CIR, EIR, Ethernet and voice, etc., col. 19, ln. 59 to col. 20, ln. 17), the tariff dependent on the id being independent of the other traffic volume container.

3. Claims 25-29 are rejected under 35 U.S.C. 102(b) as being anticipated by D'Amico et al (5,579,379).

Consider claims 25-29. D'Amico teaches a method of levying a tariff for data delivered from an originator to a terminal device in a telecommunication network (see fig. 1; col. 10, ln. 5-15), comprising reading an identifier in a packet (col. 8, ln. 55 to col. 9, ln. 25; col. 13, ln. 14-55); determining a correspondence with the identifier and the originator of the data (col. 27, ln.

Art Unit: 2643

57 to col. 30, ln. 8); and levying the tariff against the originator (col. 27, ln. 48 to col. 29, ln. 4).

Also, see the response to arguments section.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 8, 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebowitz et al (5,812,545) in view of D'Amico et al (5,579,379).

Consider claim 8. Liebowitz does not clearly teach reading an identifier in a packet; determining a correspondence with the identifier and the originator of the data.

D'Amico teaches reading an identifier in a packet (col. 8, ln. 55 to col. 9, ln. 25; col. 13, ln. 14-55); determining a correspondence with the identifier and the originator of the data (col. 27, ln. 57 to col. 30, ln. 8). Also, see the response to arguments section.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of D'Amico into the teachings of Liebowitz in order to facilitate seamless communication, a calling party pays feature would be utilized to prevent de-activation of a subscriber's portable handset as is normally done to prevent accruing charges for incoming calls over the cellular network.

Consider claim 22. D'Amico further teaches the tariff can be levied against either the originator or the terminating device (col. 20, ln. 36 to col. 30, ln. 8).

6. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebowitz et al (5,812,545) in view of Jobst et al (6,707,915).

Consider claims 9-10. Liebowitz does not teach the use of a hash algorithm for authenticating an originator.

Jobst teaches the use of a hash algorithm for authenticating an originator (col. 2, ln. 34-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Jobst into the teachings of Liebowitz in order to ensure that the activity of the terminal does not interact with the network or other types of electronic equipment in an unintended or unfavorable manner.

7. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebowitz et al (5,812,545).

Consider claims 11, 14-15. Liebowitz teaches a mobile telecommunication network comprising a first service node (terminal 12, RF unit 56) including an interface to a data network (16); a base station subsystem (terminal 12, TDMA modem, PCD 52, FAD 66; col. 3, ln. 58 to col. 4, ln. 14) operable to transmit data to the first service node and receive data from the first service node; and at least one base transceiver station (terminal 12, TDMA modem, PCD 52, FAD 66) operable to provide links to addressed user access devices (PC, telephone, PBX), the first service node operable to reading a service marking (voice, data, video in associated with CIR, EIR or ABR services) included in a first packet received by a first node (terminal 12 in

Art Unit: 2643

associated with NMM 78 and NMC 13; col. 7, ln. 45 to col. 8, ln. 45; col. 19, ln. 40-50) of the telecommunication system (10); and performing a first increment to a counter in a first traffic volume container of a call detail record (see figs 10-12; col. 20, ln. 1-17), the first increment indicative of a volume of data in the first packet (prime hour kilo-characters sent and non-prime hour kilo characters sent), the first traffic volume container dedicated to a service associated with the service marking (figs. 9-12, col. 17, ln. 34 to col. 20, ln. 30). Liebowitz further teaches applying at least on billing rate, based on the service marking, to the counter in the traffic volume container (fixed rate for CIR, variable rates for other services such as EIR, ECIR; column(s) 17, line(s) 34-57; column(s) 19, line(s) 13-33). Liebowitz does not teach that the at least one base transceiver station operable to provide RF links to mobile devices. However, it would have been obvious to one of ordinary skill in the art to modify Liebowitz teachings to include mobile device in place of conventional addressed user access devices as taught by Liebowitz in order to provider mobility feature to the end user.

Consider claim 12. Figs. 1-3 show that at least one terminal (12) in combination with the NMC (13) and billing system (190) support more than one earth terminal (12). Therefore, Liebowitz teachings as taught in claim 11 are also applied to the other earth terminal.

Consider claim 13. Liebowitz further teaches that billing system (190) processes the CDR files (196) to generate customer invoices (col. 18, ln. 25-37; col.19, ln. 51-67). It is noted that CDR files are referred to CDR of call has been terminated, closed or completed.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Liebowitz et al (5,812,545) in view of D'Amico et al (5,579,379).

Art Unit: 2643

Consider claim 16. Liebowitz does not clearly teach reading an identifier in a packet; determining a correspondence with the identifier and the originator of the data.

D'Amico teaches reading an identifier in a packet (col. 8, ln. 55 to col. 9, ln. 25; col. 13, ln. 14-55); determining a correspondence with the identifier and the originator of the data (col. 27, ln. 57 to col. 30, ln. 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of D'Amico into the teachings of Liebowitz in order to facilitate seamless communication, a calling party pays feature would be utilized to prevent de-activation of a subscriber's portable handset as is normally done to prevent accruing charges for incoming calls over the cellular network.

9. Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liebowitz et al (5,812,545) in view of D'Amico et al (5,579,379) as applied to claims 11, 16 above, and further in view of Jobst et al (6,707,915).

Consider claims 17-18. Liebowitz does not teach the use of a hash algorithm for authenticating an originator.

Jobst teaches the use of a hash algorithm for authenticating an originator (col. 2, ln. 34-64).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Jobst into the teachings of Liebowitz in order to ensure that the activity of the terminal does not interact with the network or other types of electronic equipment in an unintended or unfavorable manner.

10. Claims 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Amico et al (5,579,379) in view of Liebowitz et al (5,812,545).

Consider claims 30-34. D'Amico does not teach the limitations of claims 30-34.

Liebowitz teaches a node of a network for performing billing procedures on call detail records, comprising a processing unit (198); memory unit (RAM or ROM is inherently associated with the computer 198); an interface for receiving the CDR (billing computer 198 receives CDR files from network management system 210). Liebowitz further teaches a method of performing traffic volume accounting in a mobile telecommunication system, comprising reading a service marking (voice, data, video in associated with CIR, EIR or ABR services) included in a first packet received by a first node (terminal 12 in associated with NMM 78 and NMC 13; col. 7, ln. 45 to col. 8, ln. 45; col. 19, ln. 40-50) of the telecommunication system (10); and performing a first increment to a counter in a first traffic volume container of a call detail record (see figs 10-12; col. 20, ln. 1-17), the first increment indicative of a volume of data in the first packet (prime hour kilo-characters sent and non-prime hour kilo-characters sent), the first traffic volume container dedicated to a service associated with the service marking (figs. 9-12, col. 17, ln. 34 to col. 20, ln. 30). Liebowitz further teaches that the billing system (190) keeps track of an originator (e.g., the requestor, user, customer or caller; col. 18, ln. 59 to col. 19, ln. 50). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Liebowitz into the teachings of D'Amico in order to provide hub-less, full mesh connectivity, both fixed and dynamic bandwidth allocation, voice, video and data integration, support for frame relay and voice, support for protocols such as SNA,

Art Unit: 2643

TCP/IP, and binary synchronous (BSC), and broadcast and multicast transmission capability, while being relatively less expensive than other fully meshed satellite communication systems.

Consider claim 35. Liebowitz further shows in Figs 10-12 read on the limitations of this claim, since the call detail record include other traffic volume container (frame relay PVCs, CIR, EIR, Ethernet and voice, etc., col. 19, ln. 59 to col. 20, ln. 17), the tariff dependent on the id being independent of the other traffic volume container.

Response to arguments

Regarding the Liebowitz reference, applicant states, "Liebowitz fails to teach a tariff that is dependent on an identifier of an originator." In contrast to applicant's assertions, Liebowitz teaches, "customized rate tables can be created by operators to accommodate operating costs in different countries or to extend advantages to preferred customers. Customized rate tables reflecting promotional rates can also be used in lieu of default rate tables." (column(s) 19, line(s) 34-39). He further teaches, "an operator can use the on-line access terminal 200 to apply credits or debits to customer accounts due to rate changes, billing errors or special discounts." (column(s) 20, line(s) 18-30). It is clearly that the above rates (tariff) are dependent on an identifier of an originator (i.e., the customer who qualify for discounts or special rates).

Regarding the D'Amico reference, applicant states that D'Amico fails to teach reading an identifier in a packet. In contrast to applicant's assertions, D'Amico teaches the use of packet network and/or packet link (see figs. 2, SS#7 links, IS-41 links, IP links, column(s) 12, line(s) 28-31; column(s) 13, line(s) 14-55; column(s) 21, line(s) 14-24; column(s) 24, line(s) 65 to column(s) 28, line(s) 60). Noted that packet is broadly defined as a block or grouping of data

Art Unit: 2643

that is treated as a single unit within a communication network. D'Amico discloses, "each query and response includes data fields for a variety of different pieces of information relating to the current call. Of particular note here,... a "service key" which is the calling party's address and digits representing the called party address ...". Furthermore, the CPP service is a service provided by the ISCP. According to figs. 2, and column(s) 12, line(s) 28-31, "the local area STP's are in turn connected to each other and to the region STP 31 via an SS#7 packet switched network. The region STP 31 communicates with the ISCP's 40 via a packet switched network communications." Therefore, all messages transmitted between the SSP's and the ISCP's are obviously packetized and including calling party's address and digits representing the called party address.

Conclusion

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

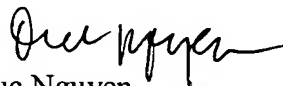
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 2643

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Nguyen whose telephone number is 703-308-7527. The examiner can normally be reached on 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Duc Nguyen
Primary Examiner
Art Unit 2643

1/19/05